



N.A.D. 1983 FEET COORDINATES		
CHANNEL	NORTH	EAST
3-N	1779856.02	6534097.47
3-S	1779531.21	6534227.97
1-N	1779160.81	6532628.85
1-S	1778896.24	6532770.08
2-N	1779418.58	6533058.01
2-S	1779102.27	6533218.72

NOTES:
SURVEYED BY THE CORPS OF ENGINEERS.
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST FOOT AND HUNDREDTHS OF A FOOT. ELEVATIONS ARE BASED ON MLLW DATUM.
1:00 INDICATES THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.
PLANE GRID AND NAD83 COORDINATES WERE DERIVED FROM PUBLISHED NAD07 CALIFORNIA ZONE II STATE PLANE COORDINATES, USING USGS NADCON CONVERSION METHODS.

NOTES:
DRAWINGS NOT TO BE USED AS NAVIGATION CHARTS, ONLY CHANNEL CONDITION AT DATE OF SURVEY.
THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U. S. COAST GUARD.
BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.
BASE MAPS WERE COMPILED BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY FLOWN AUGUST 1996.

SYMBOL		DESCRIPTION		DATE	APPROVAL
REVISIONS					
DRAWN BY:				CONTRA COSTA COUNTY CALIFORNIA	
TRACED BY:				BULLS HEAD CHANNEL EXTENSION	
CHECKED BY:				CONDITION SURVEY	
SUBMITTED:				2 MAY 2002	
PROJECT COORDINATOR:				APPROVED: DATE:	
APPROVAL RECOMMENDED:				DATE:	
CHIEF, ENGINEERING BRANCH				CHIEF, ENGINEERING & TECHNICAL SERVICES DIVISION	
PREPARED UNDER THE DIRECTION OF				SCALE: 1" = 200' JOB No.	
TIMOTHY S. O'ROURKE				DRAWING NUMBER	
COLONEL, C.E., DISTRICT ENGINEER				SHEET: 3 OF 14 4 2 209	